

ABSTRACT

An orthotic protective device collectively including a base unit connected to a
5 metacarpal unit by a hinge system designed to protect and prevent hyperextension
and hyperflexion movements of the metacarpal, carpal, radius and ulna regions.
The base unit and metacarpal unit includes a longitudinal support member and a
casing, respectively, lined with at least one pad having a tongue. At least one
releasable fastener is mated to the support member and casing and extends to the
10 tongue of the pad.

Apertures of the base unit are mated and connected to apertures of the hinge
system which form an articulated joint allowing the hinge system to move in an
upward manner allowing for natural extension of the user's wrist and in a downward
fashion for unlimited flexion motion. The base unit and the hinge system may both
15 have at least one stop formed thereon; and as these stops come into contact with
one another, it limits the flexion, extension and radial-ulnar deviation. Further, an
aperture of the metacarpal unit is mated and fastened to an aperture in the hinge
system by a swivel joint which allows for lateral movement of the user's wrist.